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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,804	09/09/2003	John E. Finger	27980/359583	7060

7590 04/05/2005

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EXAMINER

TRAN, HUAN HUU

ART UNIT	PAPER NUMBER
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2861

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,804

Applicant(s)

FINGER ET AL. *sm*

Examiner

Huan H. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on papers filed on 09/09/03 and 11/06/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,21,26,27,29 and 30 is/are allowed.
- 6) ☒ Claim(s) 1-19,22-25,28 and 31-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1-3 ; 4-5; 6, 7, 31; 8, 9 and 32; 10, 11, 25; 12, 13; 14-16 and 33; 17-19 and 34; 22-24 and 35; 28 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 2, "said UV converging zone" (step d) lacks antecedent basis. It should be changed to --said UV converging radiation field--.

Claims 1-3, "said UV energy" (step c) lacks antecedent basis. It should be changed to --the UV energy emitted from said UV energy source--.

Claims 4-5, "said UV energy" (step c) lacks antecedent basis. . It should be changed to --the UV energy emitted from said UV energy source--.

Claim 6 is not clear regarding the limitation "printing an upon said substrate". It should be changed to --printing an image upon said substrate--.

Claims 6, 7, 31, "said UV energy" (step c) lacks antecedent basis. . It should be changed to --the UV energy emitted from said remoted UV energy source--.

Claim 6, "said UV energy" (step e) lacks clear antecedent basis. It should be changed to --said emitted UV energy--.

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Claim 7, “said converging, radiation field” should be changed to –said converging radiation field--.

Claim 31 appears to be incorrect. The step of providing a liquid filled light pipe should be step c.

Claims 8, 9 and 32, “said focal point” (step e) lacks antecedent basis.

Claims 8, 9 and 32, “said remote UV energy source” (step e), “said UV energy” (step e) lack antecedent basis. Moreover, there are two step e recited. “said UV energy” should be changed to –the UV energy emitted from said UV energy source--.

Claim 8, step e (second one), “said UV energy” lacks clear antecedent basis. It should be changed to –said emitted UV energy--.

Claim 32 is not clear since there are two step e recited.

Claims 10, 11 and 25, “said UV energy source” (steps b and c) lacks antecedent basis. It should be changed to –said UV radiation source--.

Claim 11, “said ink imprinted image”, “said image” lack antecedent basis. It should be changed to –said ink imprinted substrate--.

Claim 25, “said converging UV radiation field” should be changed to –said converging radiation field” for consistency of claim terminology.

Claims 12 and 13, “said UV energy source” (step b) lacks antecedent basis. It should be changed to –said UV radiation source—for consistency of claim terminology.

Claim 13, “said ink imprinted image”, “said image” lack antecedent basis. It should be changed to –said ink imprinted substrate--.

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Claims 14-16 and 33, "said UV energy" (step b) lacks antecedent basis. . It should be changed to --the UV energy emitted from said UV energy source--.

Claim 16, "said diverging UV radiation field" lacks antecedent basis.

Claims 17-19 and 34, "said UV energy" 9 (step b) lacks antecedent basis. It should be changed to --the UV energy emitted from said UV energy source--.

Claim 17, step e, "said extended diverging UV radiation field" should be changed to --said extended, diverging radiation field—for consistency of claim terminology.

Claims 18 and 19, "said diverging UV radiation field" should be changed to --said diverging radiation field--.

Claims 22-24 and 35, step f, "said UV energy" lacks antecedent basis.

Claims 23 and 24, "said UV radiation field" should be changed to --said converging radiation field—for consistency of claim terminology.

Claims 28 and 36, step b, "said UV energy" lacks antecedent basis.

Allowable Subject Matter

3. Claims 20-21, 26, 27, 29, 30 are allowed.
4. Claims 1-19, 22-25, 28, 36 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
5. The following is a statement of reasons for the indication of allowable subject matter: As to claims 20-21, prior art of record do not teach or suggest the claimed combination so that UV energy is impinged on the substrate at a point above the focal point of the converging radiation field.

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Claims 1-19, 22-25, 28, 36 would be allowable for the inclusion of the limitation that the UV energy is impinged on the substrate at a point above or below the focal point of the converging or diverging radiation field.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huan H. Tran whose telephone number is (571) 272-2261. The examiner can normally be reached on at work on W-F from 6:30 to 5; T are telework days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Talbott can be reached on (571) 272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Huan H. Tran
Primary Examiner
Art Unit 2861

hht
04/01/2005